

SECRET

Copy No. *b*

of *a-d*

25X1

February 24, 1971

# ACTIVITY SUMMARY

To: John C.  
 From:   
 Subject: Activity Summary  
 Facility Visit, Contract   
 Reference:  2201201-AS-29  
 Dates: February 16, 17, 1971

25X1

25X1

On February 16 and 17, 1971  visited the sponsor lab on Contract  This visit was a continuation on work performed on the 8th and 9th of February. The plates that Max developed were analyzed for constant density. It was found that six out of the first eight plates were within tolerances and three out of the next four were also within tolerance. As more plates are developed the ratio of good to bad plates should increase.

25X1

The line voltage was checked to see if the power going to the Miller contact printer was changing. It was found that a piece of equipment used by the chemists in the darkroom was intermittently changing the voltage by one volt. It was also found that the voltage in the building was changing randomly. To correct this a constant voltage transformer should be used on the line.

Several of the plates were bleached using a controlled process. These plates were set up in the Mach-Zehnder interferometer and photographed onto Pan-X film. The interferograms on the

Declassification Review by NGA/DoD

GROUP 1

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Pan-X film were enlarged onto 8" x 10" photographic paper and measured for phase shift. One complete fringe shift is equivalent to a 360° or 100% phase shift for the wavelength of light used on the interferometer. A plot of density vs phase shift was made for the plates that were bleached.

A program plan for the next two weeks was left with Max. Thus a return visit will be made the week of March 8, 1971. At this time a review of the work performed will be made. If the results are positive, phase plates for correcting defocused imagery will be designed and fabricated using the techniques learned while making the phase step wedges.

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